Through-Delta Facility & & Delta Cross-Channel Projects

Status Update
Planned Activities

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Why a TDF/DCC Project?

- August 2000 CALFED Record of Decision
 - Evaluation of the technical viability of a 4,000 cfs diversion facility (TDF)
 - Analysis of DCC operation strategies and alternatives to alleviate water quality impacts from DCC operations
 - Satisfactory resolution of the fisheries concerns

Status of the TDF/DCC Projects

- Hydrodynamics / Water Quality Modeling by RMA
- 2006 & 2007 USGS Experiments
- TDF Alignment / Surveying / Engineering / Cost Estimate by DOE
- Partnership with USBR for fishery issues
- Summary Report → Fall 2007
- Final Report → Fall 2008

Sacramento River **DCC TDF** Intake **Gates TDF** Return Franks **Tract** San Joaquin River

Through Delta Facility Configuration

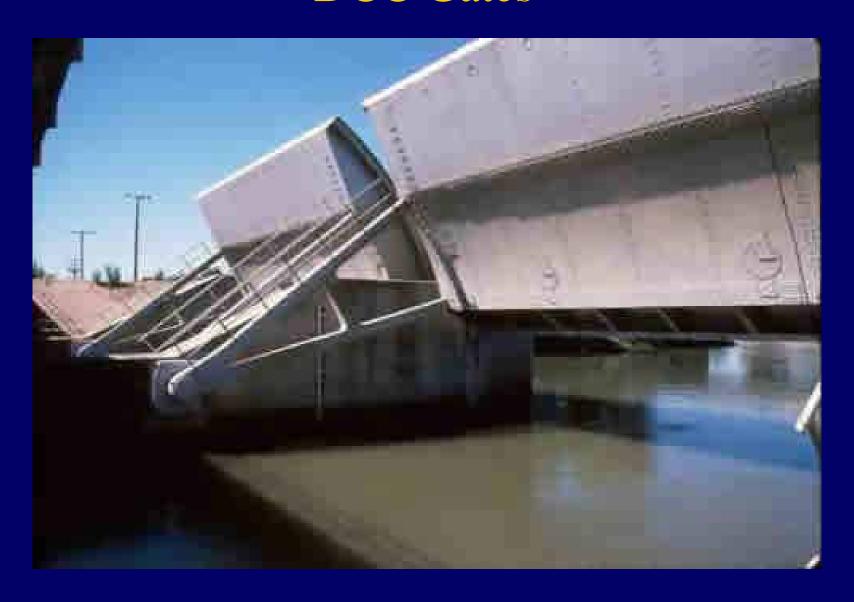
- 4,000 cfs Sacramento
 River diversion near
 Hood
- Returns to South Fork
 Mokelumne at New
 Hope Tract



Sacramento River & DCC



DCC Gates



Delta Cross Channel /Through Delta Facility What we've learned to date

- Water quality modeling results show potential for significant reduction in salinity
- Field studies show:
 - DDC operations have regional impact
 - Circulation patterns at bends in rivers affect fish behavior
 - Fish move in the water column due to day and night conditions
 - Reconfiguration of slough entrances may reduce fish entrainment

Delta Cross Channel/ Through Delta Facility Summary of Salinity (EC) Reduction

	SWP	CVP	CCWD Old River	CCWD Rock Slough
TDF	26%	22%	27%	25%
Sep 2002 (Dry)				
TDF/FT	32%	26%	36%	35%
Sep 2002 (Dry)				
DCC Tidal	7%	4%	10%	9%
Dec 1999 (Wet)*				
DCC Dawn-Dusk	13%	7%	19%	16%
Dec 1999 (Wet)*				

^{*} DCC closed thru Dec 14

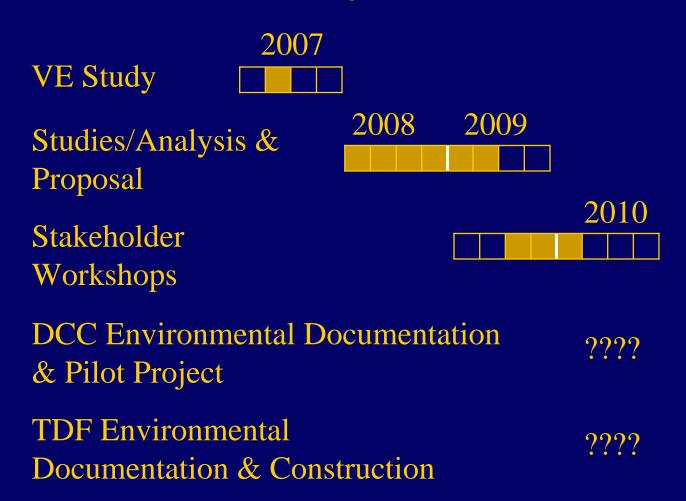
Results Summary

- The TDF with historical DCC operation provided 20-30% salinity reduction
- TDF raises EC for the Sacramento River at Emmaton and Rio Vista
 - important in critically dry years
- DCC re-operation alone may provide salinity reduction of up to 20%
 - depending on water year and re-operation scenario

Delta Cross Channel/Through Delta Facility Work Plan

- Continue water quality modeling
- Determine fishery impacts/benefits
- Propose alternatives
- Refine project alternatives
 - TDF construction
 - DCC re-operation
 - Both

Delta Cross Channel/Through Delta Facility Project Schedule



Questions

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